

REMARKS

The Examiner's attention to the present application is greatly appreciated.

In the Office Action of October 3, 2003, the Examiner rejected Claims 1 - 3 and 5 - 8 under 35 U.S.C. §112. In addition, the Examiner rejected Claims 1, 3 - 7 and 9 under 35 U.S.C. §102 or 35 U.S.C. §103. Since Claims 2 and 8 were not rejected under 35 U.S.C. §102 or §103, it is believed that these claims would be allowable if rewritten to remove the rejection under 35 U.S.C. §112.

In order to overcome the Examiner's rejections, Applicant has amended the claims to more distinctly define the present invention. In particular, Claim 1 has been amended to incorporate all of the limitations of its dependent Claim 2. Moreover, Claims 2, 3 and 7 have been cancelled. Claims 7 and 8 have also been amended to correct grammatical errors and to more distinctly define preferred constructions of Applicant's invention. The independent method Claim 9 has been amended to include all the structural limitations of Claim 1 and previous Claim 2. Finally, Claims 10 - 13 have been added which define preferred methods for collecting particulates using the adaptable filtration cassette of the present invention.

No new matter has been added by these amendments. Support for the amendments can be found in previous claims, within the specification and within the drawings.

Reexamination, reconsideration and allowance of the claims is respectfully solicited.

REJECTION UNDER 35 U.S.C. §112

Claims 1- 3 and 5 - 8 were rejected under 35 U.S.C. §112 as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regarded as the invention. In particular, the Examiner contended that the term “cassette” in Claim 1 is not connected to any remaining limitations, and thus the term “apparatus” in line 1 is really an aggregation of parts. Moreover, the Examiner questioned what the word “cassette” implied. Finally, the Examiner rejected Claim 7 under 35 U.S.C. §112 as including the word “tailored” without sufficiently explaining what was meant by “tailored”.

Applicant has substantially amended all of the claims, which included amending Claim 1 to clarify that Applicant’s invention is a cassette including the particular structure of Applicant’s invention. The word “cassette” is a term of art used in the field of air filtration to refer to a hollow structure having an inlet and an outlet for collecting particulates therein. To clarify that Applicant’s invention is directed to a cassette which is adaptable by including a restrictor plate, Applicant has amended the preamble of Claim 1 to remove the word “apparatus” and substitute the word “cassette”. Moreover, Applicant has removed the term “filtration cassette” from the body of Claim 1 and replaced it with the word “housing”. The housing is defined as having a central conduit, inlet port and an outlet port. This structure is believed to provide sufficient limitations to overcome the rejection under 35 U.S.C. §112.

With respect to what is meant by the word “tailored”, Applicant has deleted Claim 7 in its entirety so that this word is no longer found in the claims.

As a result of the above-described amendments, the rejection under 35 U.S.C. §112 is believed to have been overcome.

REJECTION UNDER 35 U.S.C. §102 AND/OR 35 U.S.C. §103

The Examiner rejected Claims 1, 3 - 7 and 9 under 35 U.S.C. §102 or 35 U.S.C. §103 in view of *Basch et al.* (U.S. Patent No. 5,898,114). The Examiner did not indicate that Claims 2 or 8 were rejected under 35 U.S.C. §102 or §103, and are thus believed allowable if the rejections under 35 U.S.C. §112 were overcome.

Applicant's Invention

Applicant's invention is directed to an adaptable filtration cassette which includes a filtration medium and a removable restrictor plate. Moreover, Applicant has amended the claims so that each of the claims include the limitation that the filtration medium and restrictor plate are substantially planar and positioned within the housing in abutting relationship.

Applicant's adaptable filtration cassette enables the use of the cassette within two modes. In particular, as claimed, the filtration cassette is capable of operating in a first mode without use of the restrictor plate. Within this mode, the filter medium is free from obstruction so that a larger portion of the filter medium can be used for collecting particulates. Meanwhile, the adaptable filtration cassette is also capable of being used in a second mode. In particular, insertion of the planar restrictor plate to be positioned adjacent the filtration medium within the housing causes a localization of particulate collection to a smaller area upon the filtration medium.

The construction enables the adaptable filtration cassette to be operated in two modes. In particular, in a first mode substantially all of the surface area of the filter medium is used for collecting particulates. Meanwhile, in a second mode, the restrictor plate is positioned within the cassette's housing so as to be in abutting relationship with the filtration medium. Liquids or gases passing through the inlet port and into the cassette's central conduit will engage the restrictor plate and be restricted to pass through the portal having dimensions substantially smaller than the filtration medium so as to collect particulates within a localized area.

Applicant has also amended the claims so that the restrictor plate is provided in a substantially planar construction. The planar construction causes a large area of the filtration medium to be covered, providing localization of particulates within the area defined by the portal. Moreover, the planar restrictor plate enables the restrictor plate to include multiple portals, as defined in Claims 5, 6, 12 and 13. As explained in page 12 of the specification, the multiple portals allow multiple samples to be collected simultaneously for one filter. These multiple samples may be used for various purposes including for quality control, statistical confidence, etc.

Basch et al.

Basch et al. discloses an apparatus including inlet and outlet ports, a filter and a plate 92. This construction does not appear to be a filtration cassette. Moreover, *Basch* does not disclose a cassette capable of operating in a first mode and a second mode as

claimed by Applicant. *Basch* also does not disclose a planar restrictor plate, or a restrictor plate including multiple portals as claimed by Applicant.

Robertson et al. (U.S. Patent Nos. 6,517,593 and 6,632,271)

Previously, Applicant submitted an Information Disclosure Statement submitting U.S. Patent No. 6,517,593 for examination. In addition, with the submission of the present amendment, Applicant submits U.S. Patent No. 6,632,271 for examination with the filing of an Information Disclosure Statement. Both of these patents name *Robertson et al.* as the inventors and disclose substantially identical constructions.

Robertson et al. discloses a cassette for sampling ambient air. The cassette includes a housing having an inlet port, central conduit and outlet port. In addition, the cassette utilizes a frusto-conical insert for focusing particulates onto a particular region of the filtration medium. However, *Robertson et al.* does not disclose a restrictor plate having a planar construction. *Robertson et al.* also does not disclose a restrictor plate including multiple portals.

THE PRIOR ART DOES NOT DISCLOSE OR
SUGGEST APPLICANT'S INVENTION

As reflected in the amended claims, Applicant's invention is directed to a cassette which is capable of operating in two modes, a first mode which utilizes substantially all of the surface area of a filtration medium, while the second mode incorporates a restrictor plate within the cassette's housing to localize particles to a portion of the filter medium. The restrictor plate is planar and positioned to abut the filtration medium. The planar construction provides an improved construction for blocking particles from engaging the filtration medium in areas where particulates are not intended to engage. Moreover, the planar construction enables the restrictor plate to include multiple portals for providing multiple samples. These claimed features are nowhere suggested in *Basch et al.*, *Robertson et al.*, or the rest of the prior art.

Because each of the claims include features not disclosed or suggested in the prior art, the claims are believed allowable.

CONCLUSION

Claims 1, 4 - 6, and 8 - 13 are believed to be in condition for allowance and notice thereof is respectfully solicited. If there are any remaining issues that need to be resolved, it is respectfully requested that a telephone call be placed to the undersigned.

Respectfully submitted,

DRUMMOND & DUCKWORTH

A handwritten signature in black ink, appearing to read "David G. Duckworth", written in a cursive style.

David G. Duckworth
Registration No. 39,516
Attorney for Applicant
Telephone: (949) 724-1255